

Ex. 6 Personal Privacy (PP)

From: d'Almeida, Carolyn K.
Sent: Monday, May 07, 2018 2:22 PM
To: Herrera, Angeles <Herrera.Angeles@epa.gov>
Subject: Ex. 6 Personal Privacy (PP)

Hi Angeles

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Currently we have received and are evaluating the AFs Pilot Study workplan, still assembling comments. It appears that this proposal is a Pilot Study in name only, as the title page is the only place where it mentions that it is intended to be a Pilot Study. Although AF has issued the workplan as a final document, and is proceeding to procure the materials and install infrastructure, many of our technical comments remain unaddressed. Otherwise, the workplan remains substantially unchanged from the full-scale RD/RA implementation. AF still intends to inject 1000 tons of sodium sulfate into the subsurface over the course of the next year. They acknowledge that it may create hydrogen sulfide gas at the well heads but include no contingency response other than to adjust the dosing rate. They will be allowing sulfate to migrate off down gradient, with no plans for monitoring conditions down gradient. It seems the plan is to create an emulsion with the LNAPL to make it more easily degradable, but this may also make the entire mass more mobile, especially as the subsurface is still near boiling temperatures in some areas. It seems likely that once the mass migrates down gradient and disperses it may be more easily degraded, however, the plan contains no preparations for monitoring of downgradient conditions, and does not acknowledge the potential for off-site migration, and does not have an adequate plan to address loss of containment. The hydraulic containment system EPA asked for during informal dispute was only designed to operate to promote redistribution of injected sulfate, operating at a maximum capacity of about 100 gpm. Verbal comments just received from Techlaw after providing 20 pages of comments: "there is not enough information in the plan as written to implement the proposal, or to evaluate the results." The Decision Tree proposed in the workplan to evaluate the remedy did not include monitoring parameters to evaluate degradation of benzene within the LNAPL. At the BCT meeting Amec indicated that if any LNAPL was found after the completion of the 3-year pilot, "the criteria for transition to MNA would not be met." But as long as the rising water table continues to enter areas of LNAPL saturated vadose zone, LNAPL will continue to appear in wells and the MNA transition criteria will never be met. It is not clear what the purpose of sulfate injection is, other than to get EPA off AF's back for a period of time, generate ambiguous data that will be impossible to dispute until the 20-year time frame is met. The proposal AF has provided does not make any technical sense; I continue to have grave concerns that it will create a groundwater plume that will be much more costly to address in the future. Resolution of the dispute was intended to enable us to buy time until more favorable conditions to invoke formal dispute; but I continue to have concerns about AFs ability to oversee their contractor under the performance based arrangement.

I would feel better if we had established sentry wells and criteria for mandatory action if contamination reaches those wells – there are no provisions for that in the work plan. I have discussed this with Wayne at ADEQ and he agrees we need to bring these things up in a letter; however ADEQ management is not likely to agree to another stop work.

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"Because a waste is a terrible thing to mind..."